74TH CONGRESS
1st Session

SENATE

DOCUMENT
No. 13

INDUSTRIAL PRICES AND THEIR RELATIVE INFLEXIBILITY

LETTER

FROM

THE SECRETARY OF AGRICULTURE

TRANSMITTING

IN RESPONSE TO SENATE RESOLUTION No. 17, A REPORT RELATING TO THE SUBJECT OF INDUSTRIAL PRICES AND THEIR RELATIVE INFLEXIBILITY

JANUARY 17, 1935.—Ordered to lie on the table and be printed with illustrations

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1935

Copies of this publication may be procured from the
Superintendent of Documents, U. S. Government Printing Office
Washington, D. C., at 5 cents a copy

LETTER OF TRANSMITTAL

DEPARTMENT OF AGRICULTURE,
WASHINGTON, D. C., *January 15, 1935.*

Col. EDWIN A. HALSEY,
Secretary of the Senate, Washington, D. C.

DEAR COLONEL HALSEY: Pursuant to Senate Resolution 17, January 3 (calendar day, January 7), 1935, I am submitting to you a report prepared and just now presented to me in final form by Gardiner C. Means, economic adviser on finance, touching the subject of industrial prices and their relative inflexibility.

I presume that this is the "certain study, memorandum, or report" to which the Senate resolution refers, since Dr. Means has made no study or report "relative to monopolistic influence upon, or monopolistic control of, industrial prices." His report deals with the administrative character of a large body of industrial prices and places particular emphasis on the inflexibility of prices in industries in which active competition is present.

Sincerely,

H. A. WALLACE,
Secretary.

LETTER OF SUBMITTAL

UNITED STATES DEPARTMENT OF AGRICULTURE,
WASHINGTON, *January 15, 1935.*

I am herewith submitting a report containing the results of (1) a study into the behavior of prices during the depression and (2) an interpretation of the meaning of the price inflexibilities which the study disclosed. The study was undertaken to throw light on the disparities which existed between agricultural and industrial prices. Its results cast light on the character of the maladjustments which burden our whole American economy and suggest the route toward basic economic readjustment.

The report was first prepared in preliminary form and circulated for criticism among economists and others in the administration. The statistical findings and their implications for monetary policy were presented to a joint session of the American Statistical Association and the Econometric Society at Chicago, December 27, 1934. The final report has been prepared in the light of the criticisms offered on the earlier reports and does not differ in essentials from the report in its preliminary form.

GARDINER C. MEANS.

CONTENTS

N. R. A., A. A. A., AND THE MAKING OF INDUSTRIAL POLICY

By Gardiner C. Means, economic adviser on finance to the Secretary of Agriculture

INTRODUCTION

The attached charts point to the wide-spread presence in our economy of inflexible administered prices which have produced highly disrupting effects in the functioning of the economy and which are largely responsible for the failure of a policy of laissez faire. The charts indicate that there are two essentially different types of market in operation—the traditional market in which supply and demand are equated by a flexible price and the administered market in which production and demand are equated at an inflexible administered price. In the first type of market economic adjustments are brought about primarily by fluctuations in price. In the second type of market economic adjustments are brought about primarily by changes in volume of production, while price changes are of secondary significance in producing adjustment.

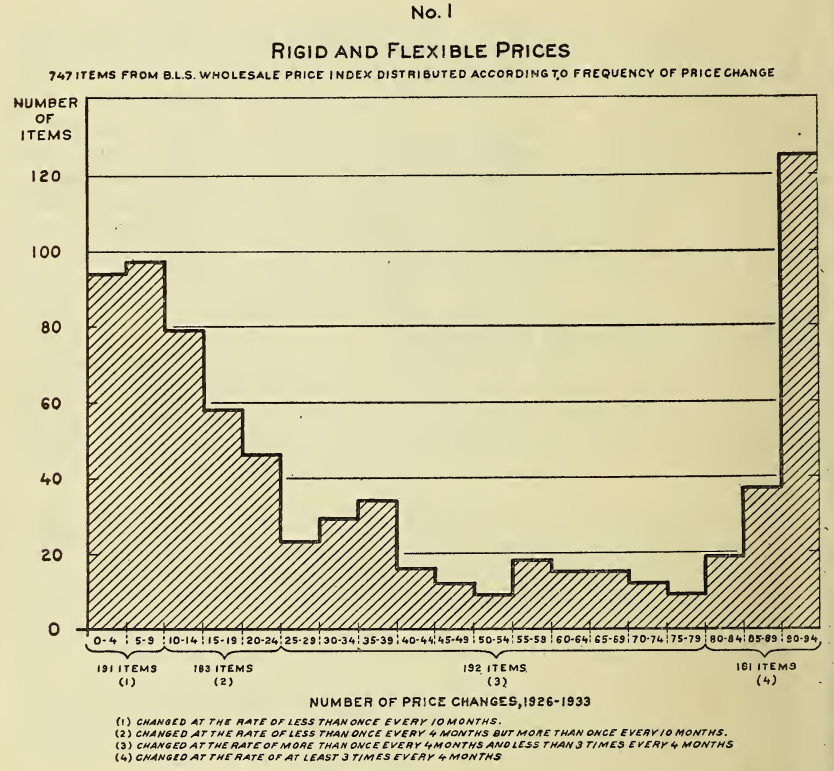
The difference between market prices and administered prices is clear. A market price is one which is made in the market as the result of the interaction of buyers and sellers. The prices of wheat and cotton are market prices as are many other agricultural products. This is the type of price around which traditional economic theory has been built.

An administered price is essentially different. It is a price which is set by administrative action and held constant for a period of time. We have an administered price when a company maintains a posted price at which it will make sales or simply has its own prices at which buyers may purchase or not as they wish. Thus, when the General Motors management sets its wholesale price for a particular model and holds that price for 6 months or a year the price is an administered price. Many wholesale and most retail prices are administered rather than market prices. For administered prices the price is rigid, at least for a period of time, and sales (and usually production) fluctuate with the demand at the rigid price.

Administered prices should not be confused with monopoly. The presence of administered prices does not indicate the presence of monopoly nor do market prices indicate the absence of monopoly. In many highly competitive industries, such as the automobile industry, prices are made administratively and held for fairly long periods of time. On the other hand, it is conceivable that, in a monopolized industry the product might be turned out according to some fixed production schedule and sold for what it would bring in the market regardless of price. Thus, in the first case, we would have administered prices in a competitive industry and in the second market prices in a monopolized industry. In general, monopolized

industries have administered prices, but so also do a great many vigorously competitive industries in which the number of competitors is small. The bulk of the administered prices shown below are in competitive industries.

Chart I indicates the very great importance of administered prices in the American economy. It shows all the commodities making up the Bureau of Labor Statistics' wholesale price index (except railroad and utility rates and a few composite items) distributed according to frequency of price change. The chart covers the number of changes from month to month for each item during the 8-year period from 1926 to 1933. In the right-hand column of the chart are 125 items



which changed practically every month in the 8 years. In the left-hand column are 95 items which changed price less than five times in 8 years. The remaining 527 items fall between these extremes. The U-shaped character of the distribution curve carries the usual suggestion that there are two quite different type of price. It is clear that the highly flexible prices of the right-hand group of items are for the most part made in the market, and are the type of prices around which traditional economic analysis has been built. The inflexible prices of the group of items at the left of the chart are established administratively and held for appreciable periods of time. More than half the items covered in the chart averaged less than three changes a year. These items represent a type of price essentially

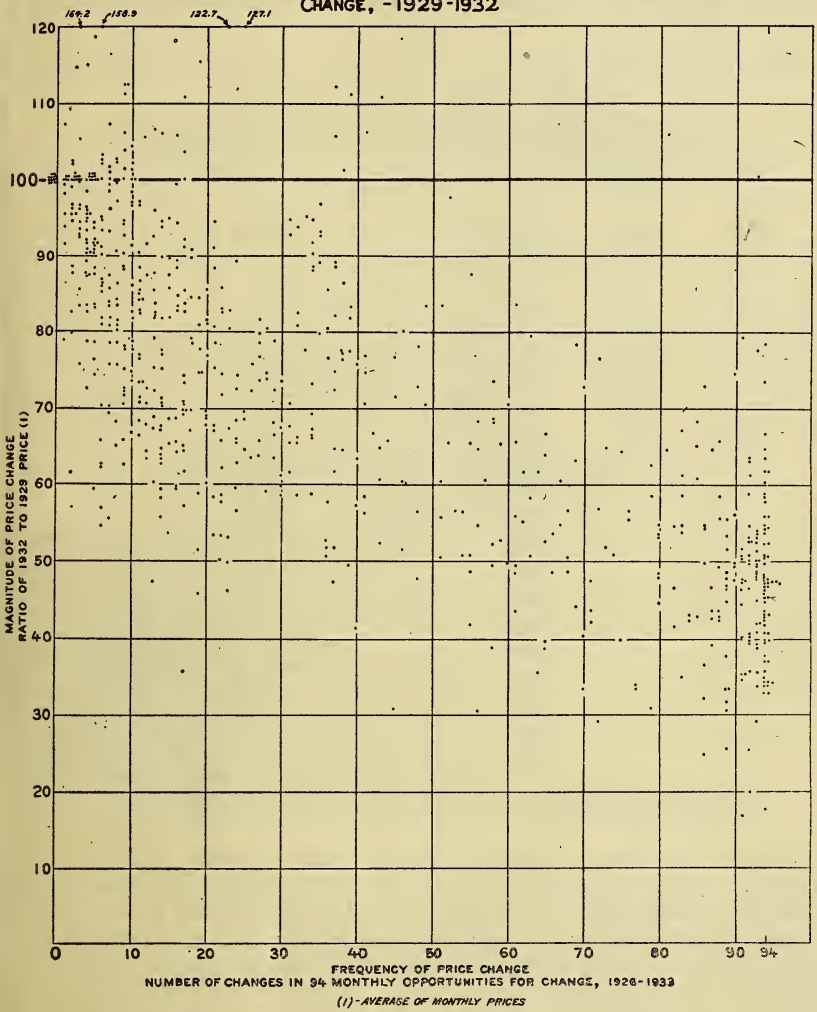
different in its effects from the flexible market price on which the policy of laissez faire has been founded.

Chart 2 shows clearly that frequency of price change and magnitude of price change in the depression have gone together. In this chart

No. 2

RELATION BETWEEN FREQUENCY OF PRICE CHANGE AND MAGNITUDE OF PRICE CHANGE DURING DEPRESSION. DISTRIBUTION OF 750 PRICE SERIES INCLUDED IN B.L.S. WHOLESALE PRICE INDEX

BY:- FREQUENCY OF PRICE CHANGE AND MAGNITUDE OF PRICE CHANGE, -1929-1932



the same items as in chart 1 are distributed along the horizontal axis according to the same scale of frequency of price change used in the first chart while the vertical scale represents the ratio of prices in 1932 to prices in 1929 taken as 100. Each dot represents one item and its distance from the base line of 100 reflects its price change between 1929 and 1932. If it is below the base line it has fallen

during the depression; if above, it has risen. At the right are the flexible priced items whose prices in 1932 centered around a price level half that of 1929, while the bulk of the administered prices at the left are centered around 90 percent of the predepression levels though with a considerable dispersion. The items which changed frequently in price show a large drop during the depression while those having a low frequency of change tended to drop only a little in price.

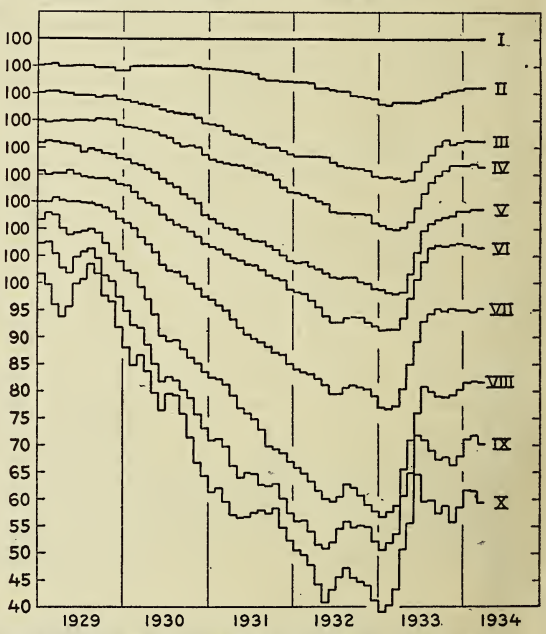
Chart 3 indicates even more clearly this tendency of frequency of price change and magnitude of price drop in the depression to go

No. 3

RELATION BETWEEN FREQUENCY OF PRICE CHANGE AND MAGNITUDE OF PRICE CHANGE DURING DEPRESSION

PRICE INDEXES FOR 750 ITEMS INCLUDED IN B.L.S. WHOLESALE PRICE INDEX GROUPED ACCORDING TO FREQUENCY OF PRICE CHANGE (1926-1933)[1]

INDEX	NO. OF ITEMS	FREQUENCY OF PRICE CHANGE[Δ]
I	14	0
II	77	1-4
III	76	5-8
IV	82	9-13
V	96	14-21
VI	88	22-35
VII	86	36-60
VIII	85	61-87
IX	83	88-93
X	63	94
	750	



[1] ARITHMETIC AVERAGE OF MONTHLY PRICE RELATIVES BASED ON AVERAGE OF MONTHLY PRICES IN 1926 AS 100
Δ NUMBER OF CHANGES IN 94 OPPORTUNITIES FOR CHANGE

together. It shows 10 unweighted price indexes computed by grouping into one index the prices of items which did not change at all in the 8-year period; grouping in another index those which changed in price every month; and dividing the remaining items into 8 groups approximately equal in number, selected and arranged according to increasing frequency of price change. Again, the big drop in price is in the items which were clearly not administered while the administered prices tended to show less price drop.

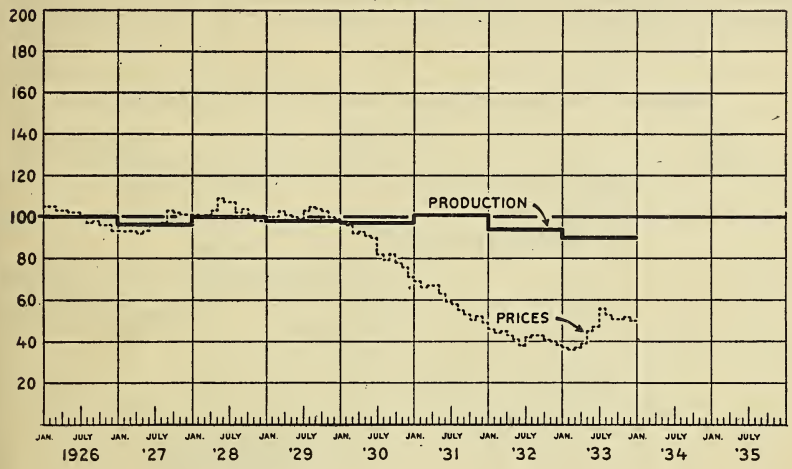
Charts 4 and 5 indicate the wholly different economic effect of flexible market prices and inflexible administered prices. Chart 4 shows the character of the adjustment which takes place in a market of the traditional type in which prices are flexible. It reflects the change in prices and production for agriculture as a whole during the depres-

sion. Not until the control program in 1933 was there any significant drop in agricultural production. Practically the whole impact of falling demand worked itself out in falling prices.

No. 4

PRICES AND PRODUCTION FOR AGRICULTURE, 1926-1933

(1926=100)



No. 5

PRICES AND PRODUCTION FOR THE AGRICULTURAL IMPLEMENTS INDUSTRY, 1926-1933

(1926=100)

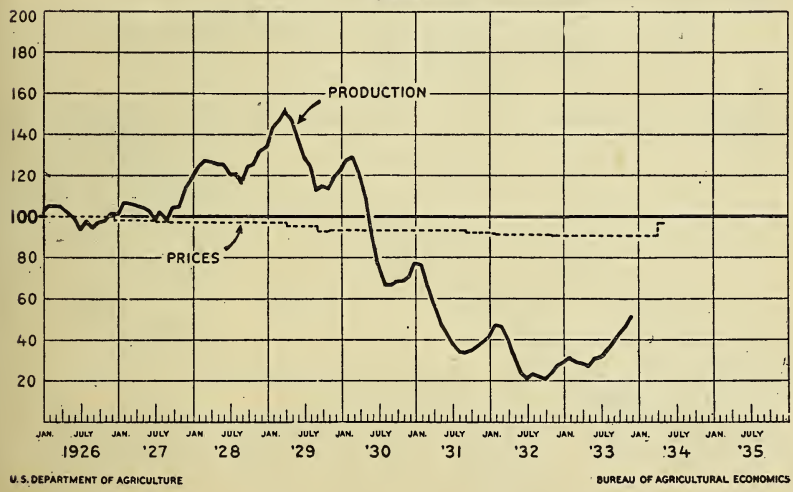


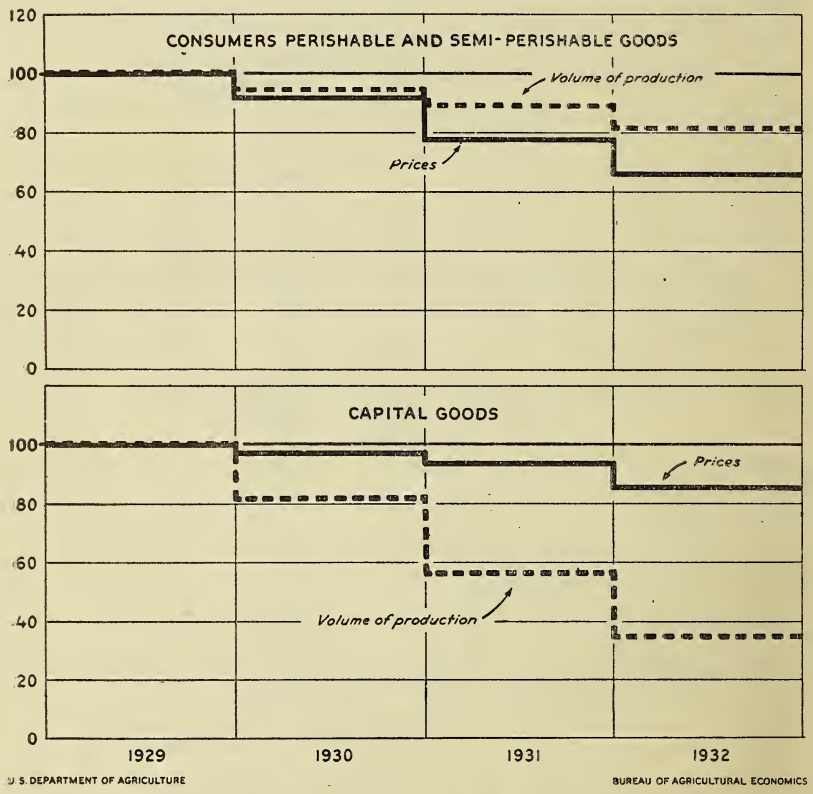
Chart 5 shows in somewhat exaggerated form the opposite development which takes place in a market of the second type in which prices are held essentially rigid by administrative action. It reflects the changes of prices and production of agricultural implements. Practically the whole of the impact of falling demand worked itself out in

falling production and only to a secondary extent by falling prices. The exaggeration comes partly from the fact that such partially counterbalancing items as improvements in quality and reduction in the direct costs of production are nowhere indicated and partly because certain minor concessions in the time payments on certain items were made, based on fluctuations in the price of certain agricultural products. Neither of these affect the essential picture told by the chart, the rigid prices and fluctuating production, which is in so much contrast to

No. 6

RELATIVE DECLINE IN PRICES AND PRODUCTION, 1929-1932

1929 = 100



U. S. DEPARTMENT OF AGRICULTURE — BUREAU OF AGRICULTURAL ECONOMICS

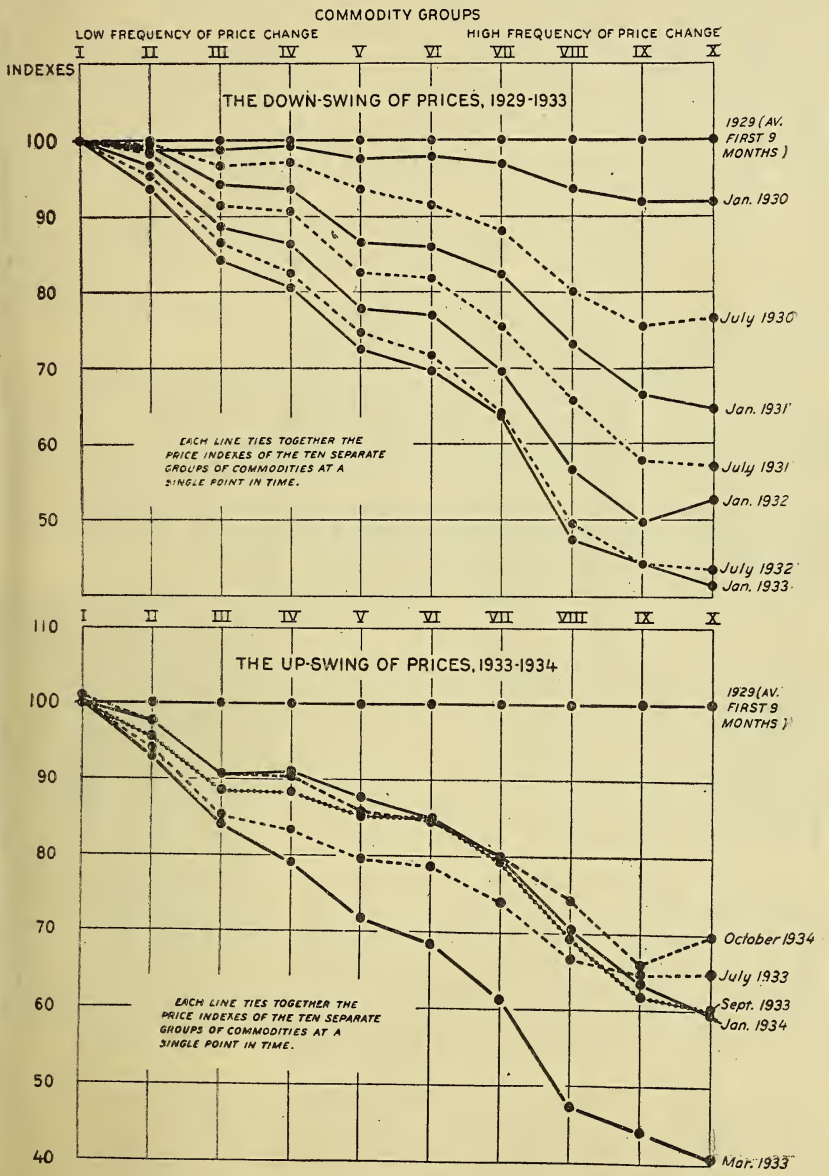
the flexible prices and stable production assumed by traditional economists and typical of the field of agriculture.

Chart 6 indicates the difference in economic effect of administered and market prices. It shows the relative changes in prices and production for the consumers perishable- and semiperishable-goods industries and the capital-goods industries. For consumers' goods, prices dropped appreciably while production dropped to a lesser extent. For the capital-goods industries, the prices dropped little while production dropped out from under the relatively inflexible prices. An important part of the difficulties in the capital-goods industries must be attributed to this fact that prices did not adjust.

Chart 7 indicates the disrupting effect of administered prices on the price structure. It shows the downswing of prices during the depression and their subsequent upswing since March 1933. The

CHART 7

RELATIVE PRICE CHANGES FOR TEN COMMODITY GROUPS ARRANGED ACCORDING TO INCREASING FREQUENCY OF PRICE CHANGE



indexes for the same 10 commodity groups covered in chart 3 are arranged in a new fashion with time represented by the successive lines on the chart and the price relatives for different commodity

groups arranged along the horizontal axis according to increasing frequency of price change. Thus, at the left are the commodity groups made up of items that changed infrequently in price. At the right are the commodity groups made up of items which changed price frequently. Each group is represented by a series of dots indicating the level of prices at successive dates with the 1929 prices as 100. Thus, the prices of group X dropped as follows: 1929, 100; January 1930, 91; January 1931, 64; January 1932, 52; January 1933, 41. For the inflexible group I, prices remained constant. For intermediate groups, the successive prices fell to intermediate degrees. Each line on the chart ties together the price relatives of the 10 different commodity groups at one particular date. Thus, for January 1930, the price relatives for the 10 groups lie along the second line while their price relatives for January 1933 lie along the bottom line. The progress of the depression is shown by the general swing down of the successive lines. The whole price structure pivoted around the rigid prices. The relative uniformity of the swing down should be noted for it seems to reflect a very real set of basic price relationships. The corresponding upswing of prices since March 1933, is shown in the lower part of the chart.

If the corresponding indexes of production for each group of items were available, they would show that the downswing of production had pivoted around the group of flexible priced commodities. Production at the right of the chart would have stayed up while production at the rigid price end of the chart would have chopped most. While exactly corresponding production figures are not available, the relation of price drop and production drop for 10 major industries from 1929 to the spring of 1933 are shown below:

	Percent drop in prices	Percent drop in production
Agricultural implements	6	80
Motor vehicles	16	80
Cement	18	65
Iron and steel	20	83
Auto tires	33	70
Textile products	45	30
Food products	49	14
Leather	50	20
Petroleum	56	20
Agricultural commodities	63	6

One can make the broad generalization, having of course many exceptions, that for industries in which prices dropped most during the depression production tended to drop least, while for those in which prices were maintained the drop in production was usually greatest. Indeed, the whole depression might be described as a general dropping of prices at the flexible end of the price scale and a dropping of production at the rigid end with intermediate effects between.

* * * * * * *

The shift from market to administered prices reflected in the foregoing charts is the development which has destroyed the effective functioning of the American economy and produced the pressures which culminated in the new economic agencies of government.

The following memorandum attempts to examine the implications of this shift as they relate to national policy and particularly to the structure and functions of A. A. A. and N. R. A.

PART I. THE BASIC CAUSE FOR THE FAILURE OF A LAISSEZ FAIRE POLICY

1. The National Recovery Administration and Agricultural Adjustment Administration were created in response to an overwhelming demand from many quarters that certain elements in the making of industrial policy (including agriculture as an industry) should no longer be left to the market place and the price mechanism but should be placed in the hands of administrative bodies—code authorities, crop control committees, etc. This demand is not only a product of emergency conditions, but is also a reflection of more basic dissatisfactions with the results of laissez faire, such as are reflected in the demands for weakening the antitrust laws, strengthening labor organization, intervening to aid the farmers, and for such economic reorganization as will bring the higher standard of living made possible by modern technology.

2. The whole trend of social development both in this country and abroad has been to recognize the failure of a complete laissez faire policy.

3. The basic cause for the failure of a laissez-faire policy is to be found in the very same forces which have made possible a high standard of living for all, namely, the gradual, century-long shift from market to administrative coordination of economic activity which has resulted in modern industrial organization and modern technology. This shift to administration has brought a new type of competition and inflexible administered prices which disrupt the workings of the market.

4. A century ago the great bulk of economic activity in the United States was conducted on an atomistic basis by individuals or families—as is most of agriculture today—while the actions of the separate individuals were coordinated by the market. The individual produced for sale and his activity was geared to and in part controlled by flexible market prices. Balance between the actions of individuals was maintained—insofar as it was maintained—by the impersonal forces of the market and the law of supply and demand. Through the market, the apparently unrelated activities of individuals were thus made to mesh into a single coordinated whole and industrial policy was made by the market as a result. The policy of laissez faire has rested on the assumption that the market would continue to make industrial policy and would remain a satisfactory coordinating mechanism.

5. But gradually more and more of economic coordination has been accomplished administratively. Great numbers of individuals have been drawn into large factories or business organizations and their activities have come to be coordinated within the separate enterprises by administrative action. In a single factory the separate activities of thousands of workers are coordinated by the factory management so as to mesh into a single producing organization. Within single corporate enterprises, tens and even hundreds of thousands of individuals have their economic activity coordinated by administrative direction. In 1929 the activity of over 400,000 workers was meshed into a great communication system by the management of the American Telephone & Telegraph Co. Contrast the coordination and balance among this group of workers with that among 400,000 separate farmers whose action in producing more or less of each product is

controlled and balanced only by the market. In the first, we have the extreme of administrative coordination; in the second, the extreme of market coordination.

6. The shift from market to administrative coordination has gone so far that a major part of American economic activity is now carried on by great administrative units—our great corporations. More than half of all manufacturing activity is carried on by 200 big corporations while big corporations dominate the railroad and public-utility fields and play an important role in the fields of construction and distribution.

7. This development of administrative coordination has made possible tremendous increases in the efficiency of industrial production within single enterprises. The large number of workers brought into a single organization has allowed a high degree of subdivision of labor and the use of complicated series of machines so that the volume of production has been expanded way beyond the capacity of the same number of workers operating independently. Organization has made for rapid and extensive development of technology and the improving technology in turn has increased the advantages of administrative coordination. The telephone, the automobile, modern plumbing, are the joint product of technology and administration. The possibility of a high standard of living for all rests on these two interrelated factors.

8. But the very concentration of economic activity which brought increased productivity has by its nature destroyed the free market and disrupted the operations of the law of supply and demand in a great many industries and for the economy as a whole. (See appendixes A and B.)

9. Evidence of this disruption is to be found in the administrative character and relative inflexibility of price in a great many industries and the fact that on the whole prices during the depression have tended to go down least where the drop in demand has been greatest.

10. The failure of prices to adjust is perfectly familiar to business men in nearly every industry. But the implications of this familiar fact for the economy as a whole have not been recognized.

11. In a large part of industry, the market is not equating supply and demand through a flexible price mechanism, but is bringing an adjustment of production to demand at administratively determined prices. Thus, General Motors may set the f. o. b. price of a 1934 Chevrolet at $500 and produce the half million cars demanded at that price, yet be willing and eager to produce and sell a million cars at that price if only there were buyers. (See appendix C.)

12. The presence of administered prices, while it does not indicate monopoly, does mean that the number of concerns competing in the market has been reduced to the point that the individual concern has a significant power to choose within limits between changing its prices and changing its volume of production or sales. (See appendix D.) When any small drop in demand occurs, it is in a position to hold its price and reduce its production without losing all its business. As a result it tends to hold up price and reduce volume of production for the industry as a whole.

13. But this means that individuals have a direct power over industrial policy which they exercise in making business policy for their own enterprise.

14. The distinction drawn here between industrial policy and business policy is of the greatest importance.

15. According to laissez faire principles, industrial policy was supposed to result from the interaction in the market of the business policies of a large number of independent units, no one of which had any significant power. In the truly atomistic economy to which the principles of laissez faire applied, no individual buyer or seller alone had any significant power over either price or total volume of production for the industry. Prior to A. A. A., agricultural products, such as wheat and cotton, were produced and marketed under these conditions.

16. Where the number of competing units in a particular industry have been reduced to a relatively small handful, industrial policy is no longer made wholly by the market but in part by individuals. Industrial policy becomes subject to administrative control even though there is no monopoly or collusion between the separate enterprises.

17. But when the business man has the power to affect industrial policy, he almost necessarily makes wrong industrial decisions. The very position, experience and training of the business man which lead him to make the correct decisions on business policy tend to force him to make the wrong decisions on industrial policy in spite of the utmost public spirit which he, as an individual, may seek to exercise. The fact that his decisions are wrong from the point of view of the public interest is no necessary reflection on either his character or his intelligence, but arises from the nature of the situation within which he operates and the functions which he performs.

18. The business man is expected to make business policy in a way to maximize the profits of his own enterprise. When he has the power to choose between lowering price and lowering production, good business policy frequently requires him in the presence of falling demand to hold price and curtail his production even though this means idle men and idle machines. The amount by which he can count on increasing his sales by lowering price is usually so small that the whole balance of his interest as a business man points toward a restriction of production. The fact that he can lay off his workers enables him to cut production without having to carry the burden of idle workers as he does that of idle machines. His interest dictates lowering price only when he is able to squeeze his costs, particularly his labor costs. At best, it is an even choice whether he will choose to maintain profits or minimize losses by seeking a relatively large profit margin on a reduced volume or a small margin on a maintained volume of sales, and in such a situation the easier device, and the one involving the lesser risk, is the device of holding price and accepting curtailed volume. It is only because this holding of prices has become widespread and customary that the term "price chiseler" could be a term of opprobrium in an economy supposed to be coordinated through flexible prices.

19. The net effect of business control over industrial policy is, therefore, to aggravate any fluctuations in economic activity and prevent any necessary readjustments. An initial drop in demand would result, not in price readjustment, but in maintained prices and curtailment of production, thus throwing workers and machines out of employment, reducing money income and spending power, and

further reducing demand. The inflexible administered prices resulting from the shift from market to administration thus act as a disrupting factor in the economy and could cause an initial small drop in demand to become a national disaster.

20. Only as the business man was willing to go directly counter to the interests of his enterprise as a profit-making concern and against business tradition would he make the kind of decisions which, if made throughout industry, would keep the economy functioning and would serve the fundamental interests of business itself. If during the depression individual business men throughout the economy had been persuaded to lower their prices, thus making decisions which appeared by all the standards available to them to be adverse to their interests, the result would actually have been in their interest since it would have reduced the severity of the breakdown.

21. So long, therefore, as concentration exists and important powers over industrial policy are exercised in the guise of business policy and result in inflexible administered prices, the market cannot be expected to coordinate and balance economic activity under a policy of laissez faire.

22. Thus, administrative coordination—the very thing that has made modern technology and a high standard of living possible—has destroyed the effectiveness of the market as an overall coordinator by the inflexible administered prices which are inherent in the reduction of competing units it has produced.

23. It is the effects of this failure of the market mechanism which have brought the overwhelming demand from many quarters for governmental intervention in economic matters. This inflexibility has impeded the balancing of trade between nations, disrupted the workings of monetary policy, brought the banking system to its knees, obstructed the full use of human and material resources, disorganized the flow of savings into useful equipment, brought an unbalanced national budget and greatly increased economic insecurity.

PART II. THE BASIC CHOICE IN SOCIAL POLICY

1. Since the administrative coordination which promises a high standard of living carries with it inflexible administered prices which destroy the effectiveness of the market as an over-all coordinator, it is necessary to choose between two alternatives if an effectively functioning economy is to be established—either (1) atomize the administrative units to the point where inflexible administered prices disappear and the free market can become an effective coordinator, or (2) supplement the market mechanism with institutional arrangements (N. R. A., A. A. A., money system, etc.) sufficient to allow the economy to function effectively in the presence of and in spite of inflexible prices.

2. The first road would require the breaking up of large corporate units into a very great number of separate and wholly independent competing enterprises with the loss in efficiency which it would entail. Few realize the extent to which it would be necessary to pulverize industry. Each of the big automobile companies would probably have to be made into a hundred or more independent concerns; the big chemical companies would have to be broken into very much smaller units; and even after the break-up of the unregulated part of industry, the inflexible prices in the railroad and utility fields

would impede economic adjustment, unless they also were broken up and made competitive. In order to make a laissez faire policy truly effective, productive efficiency would have to be greatly impaired and a lower standard of living accepted than is made possible by modern industrial organization and modern technology.

3. The second road, while employing the market as a major instrument, would seek to supplement the market at the points where it tends to fail. Many have held that this would require Government ownership or dictatorship since they can see no other alternative to a laissez faire policy.

4. Actually, the choice does not lie between private ownership and Government ownership because the problem is primarily the distribution of controls, not the locus of ownership. (See appendix E.)

5. Nor does the choice lie between the atomization of industry and an economic dictatorship, since it is only necessary to set up an institutional framework through which certain key industrial decisions are made and within which private or corporate enterprise and initiative can function effectively.

6. If inflexible administered prices are to be accepted as an inevitable product of modern technology and modern industrial organization, the following lines of action would be called for to prevent them from being a disrupting influence and to allow the optimum use of human and material resources.

(*a*) First, all pressure making for a general revision of prices either upward or downward would have to be eliminated from the economy, since any development requiring a general change in the inflexible prices would result in a change in production and economic unbalance. This would mean that a monetary policy would have to be adopted which aimed to keep the flexible prices as a group approximately in line with inflexible prices as a group (see appendix K) and that a mechanism for the adjustment of international trade balances through general changes in prices would have to be replaced.

(*b*) Second, new techniques of control would have to be worked out for establishing the necessary elements of industrial policy so that the self-interest of individuals working through the market but limited by the framework of policy established would tend to produce the optimum use of human and material resources.

(*c*) Finally, violent dislocations in the flow of savings into capital goods would have to be minimized.

The remainder of this report will be devoted to the problems of making industrial policy.

PART III. THE PROBLEM OF MAKING INDUSTRIAL POLICY

1. The National Recovery Administration and the Agricultural Adjustment Administration are in part a product of the economic break-down resulting from inflexible administered prices. The major task ahead of them, if they are to facilitate the functioning of the economy, is to participate in the making of industrial policy where the market cannot produce satisfactory results.

2. The basic problem of both N. R. A. and A. A. A. is, therefore, to devise techniques of control for establishing the necessary elements of industrial policy.

3. Until this is recognized as the basic function of N. R. A. and A. A. A. the economic policies of these two agencies tend to be con-

tradictory and confused; once the true function of these bodies has been recognized, the organization and policy implicit in this function will clarify much of their economic activity.

4. In establishing certain elements of industrial policy, the purpose of N. R. A. and A. A. A. should be to set up a framework within which the actions of individuals or groups, operating on their own initiative and in their own interest, will result in a fully functioning economy. The objective should be to accomplish what the market is supposed to accomplish, namely, a balance of the interests of the various interest groups which constitute industry so as to produce the most effective use of human and material resources.

5. To do this it is only necessary to find key decisions for each industry which, if made right, would so condition the other elements of industrial policy that the latter could be left to the actions of individuals and the operation of the market. Thus, in the peach canning industry, the single act of setting the number of cases of peaches to be packed is said to be a sufficient supplement to the market to establish all the other elements of policy in the industry. Because of market forces, the fixing of the size of the pack is said to determine within fairly narrow limits—

(*a*) The price to and the money receipts of peach growers.

(*b*) The profits of the peach canners.

(*c*) The amount of employment given to labor in picking, packing, and transporting peaches, making tin cans, etc. (wage rates are mostly determined by other factors).

(*d*) The amount of peaches received (at wholesale) for a consumer's dollar.

6. The setting of key elements of industrial policy by administrative bodies to facilitate economic functioning is a new technique.

(*a*) Earlier interventions of government in industry have been essentially different.

(1) Antitrust legislation tried to maintain competition and the market as the maker of industrial policy and failed because it confused the absence of monopoly with the existence of a free market. The market break-down is not a matter of monopoly (as the courts have interpreted the term), but of the making of industrial policy by private individuals.

(2) Public-utility regulation establishes a major element of industrial policy—namely rates—but, because it is focused on the interests of property and not on balancing the interests of investors, workers, and consumers, it tends to aggravate the faults inherent in business decisions—witness the efforts to increase railroad rates during the depression. It has neither tackled the problem of getting service to the public under optimum conditions nor has it taken account of the problem of price rigidity introduced by the process of rate making.

(3) Government ownership and operation has involved taking on the whole job of industrial and business operation instead of simply the key industrial decisions. Government has here had to determine not only industrial policy but also business policy as well, with all the centralization which this involves.

(*b*) Collective bargaining has been a technique for establishing certain elements of industrial policy, but it tends to place the whole emphasis on the division of the spoils and loses sight of the other major aspects of industrial policy having to do with increasing the spoils to be divided.

7. In determining industrial policy by the making of key decisions, the essential problems are, first, to discover, industry by industry, what, if any, elements of industrial policy need to be established administratively and, second, to set up a mechanism which will get those key decisions made "right."

(*a*) Finding key decisions is a highly technical matter of applied economics and should become increasingly effective with experience.

(*b*) Getting the right decisions made is primarily a matter of: (1) adequate research and planning; and (2) appropriate organization to obtain the adoption of policies worked out as a joint product of the research staff and the various interests in the industry.

(*c*) "Right" decisions are those which will achieve the results that the market has been supposed to produce, i. e., if the "right" decisions are made throughout all industries, the net effect will be the smooth functioning of the economic machine, the full use of human and material resources, and a balance of interest among individuals and groups. The "right" decisions are thus "ipso facto" in the public interest (see appendix F). In a depression, the decisions in each industry could only tend in the direction of fuller utilization of human and material resources, but as each industry utilized its resources to a fuller extent its expansion would allow other industries to expand further so that the making of the "right" decisions throughout all industries would gradually lead to full utilization. (When the decisions are made to maximize profit, they tend in the reverse direction, or in a manner to minimize the impetus toward recovery coming from other directions.)

PART IV. POSSIBLE TECHNIQUES FOR MAKING INDUSTRIAL POLICY

1. If the N. R. A. and A. A. A. are to develop a partnership technique wherein government and industry are in some way combined to establish the necessary elements of industrial policy, the location and division of power and responsibility in making decisions will importantly affect the likelihood that key decisions will be made "right." Four different methods of distributing responsibility appear to be within the realm of immediate possibility.

(*a*) Decisions could be made by a body (code authority or control committee) made up of business men (or farmers) with the Government acting as a rubber stamp, reserving its veto power for extreme cases. This is the method which the N. R. A. and, to a lesser extent, the A. A. A. employed for the most part during their first year.

(*b*) The Government might undertake to make these decisions and impose them on industry, using Research and Planning Division to determine what would be "right", perhaps using the code authorities and control committees as channels for carrying out the decisions, supplemented by some method of enforcement.

(*c*) The code authorities and control committees might constitute a balanced partnership between government and business in which government represented not only the public interest but also the specific interests of other groups in industry, i. e., labor and consumers.

(*d*) The several interests might jointly be represented in making the key decisions with the Government, in possession of all the necessary factual data, exercising a veto power and responsible for seeing that the interactions of the several interests produced a balance in the public interest.

2. A body of business men constituting a code authority will almost necessarily make the wrong decisions on industrial policy for their industry for the same reasons that in an individual enterprise power over industrial policy leads to harmful industrial decisions. As has been indicated, this is due not primarily to lack of business foresight and intelligence but to the fact situation with which each industrial authority has to deal. Partly because of the particular interest which the business men have in the industrial policy established, and partly because the experience and training of business men have been primarily in the exercise of business judgment, the decisions on industrial policy inevitably tend to be made in terms of business policy. The result for each industry is comparable to the result when individual business men make elements of industrial policy through their own, strongly situated enterprises. The pressure to create values by establishing higher prices and lower production will persist. In each industry, the only sound business answer to falling demand is to restrict production so as to hold prices. The fact situation does not allow of any other business decision, even though the business interests of each industry would ultimately be better served if all industries lowered prices in the presence of falling demand.[1] (See appendix G.)

It is thus apparent that sound industrial policy cannot be expected if left to business groups alone, whether because in making industrial policy they act in their own business interest or simply because they exercise sound business judgment. When the lumber code authority raised prices, thus impeding recovery, it was acting according to sound business policy in the interests of the business men in the industry. To blame the lumber code authority for not establishing an effective industrial policy is to place the blame where it does not belong. It should rest on those who would place such a responsibility upon business men alone on the assumption that business policy, which aims to create values, and industrial policy, which aims to get things to people, are the same, and that those who are familiar with and interested in the one can be expected to accomplish the other. Only as business men failed to act as business men and failed to follow their business judgment would their decisions on industrial policy result in a properly functioning economy.

3. If the Government took on the whole job of making industrial decisions, it would be better equipped with the infomation necessary to the making of sound decisions than would anyone else; it is committed to the public interest as the basis for those decisions; and it commands the powers of enforcement.

On the other hand, it is doubtful whether the Government could effectively exercise the whole function of making industrial policy without using almost dictatorial methods. It would inevitably become the focus of group pressures vastly more vigorous and disruptive than those now existing; it would expose itself to political attack as dictatorial, and errors in detail would be used against it as political ammunition; industrial policy making by Government itself would call for a very high degree of centralization.

[1] Even if in a particular case all other industries had lowered prices, it would not be sound business policy for a particular industry to lower its prices but rather to reap the benefits at the old prices of the increased volume of activity resulting from the actions of the other industries. Only if the lowering of prices on the part of all other industries were dependent on the action of the particular industry would sound business policy call for a lowering of price and even then sound business policy would mean attempting to force other industries to lower prices as much as possible while the particular industry lowered its prices as little as possible.

4. The third possibility—joint action of Government and business, with the Government representing not only the public interest, but also the specific interests of labor and consumer groups—would probably provide the most effective available method for getting the interests of the nondominant economic groups represented in the immediate future.

On the other hand, the Government would thereby be placed in the position of playing a dual role. In behalf of the public interest it should act as arbiter between conflicting interests; as representative of labor and consumer interests it should play a partisan role. It would be most difficult for the Government to perform this partisan role, for it would be constantly under pressure from business, the strongest of the economic interest groups, to act at least equally in its behalf; democratic government rests upon the philosophy that it is an impartial rather than a partisan body; and even if this present administration, or any other particular administration, succeeded in acting on behalf of the nondominant groups, there is neither guaranty nor likelihood that the political commitments of future administrations would permit them so to act.

5. In the fourth possibility, that of having the several interests impinge upon each other under Government supervision, the Government would be placed in a favorable position to influence the decisions in the direction of the public interest as it would not have to play a partisan role and it would not have to thrust industrial policy upon those who had not shared directly in the making of that policy. Most of the conflict between economic interests would take place between representatives of these interests rather than focusing upon a representative of Government.[2]

The introduction of the other interests besides those of business would tend to push the decisions in the direction of the balance of interests which the market is supposed to achieve and whereby it is supposed to produce the optimum functioning of the economy. (See appendixes H, I, and J.) The pressure from labor representatives to maintain or increase employment and from consumer representatives to lower price and maintain the fullest use of labor and machines would be set against the business man's normal tendency to establish higher prices and lower production than the public interest demands.

Thus, in the case of canned peaches, the size of the peach pack was actually decided by a control committee composed of growers and canners, with the Secretary of Agriculture exercising a veto power over the decision. The figure finally fixed was probably not as large as the public interest demanded. The growers wanted a somewhat larger pack, the canners a smaller pack. Both consumers and picking and canning labor would have been better served by a larger pack. If consumer and labor representatives had also participated in making the decision, it is probable that the size finally set would have been somewhat larger. At the same time, if the consumers and workers had attempted to increase the size of pack too far, the growers would have shifted sides and joined the canners in resisting further increase since too large a pack would have been just as much against their interests as too small a pack.

[2] This principle was made use of in the N. R. A, when the advisory council was set up composed of representatives from the three advisory boards (business, labor, and consumer), thereby removing from the administrators the impact of conflict among the advisory boards.

It would be essential for the consumer interest to be represented as well as those of business and labor, for labor cannot always be relied upon to counteract the inclination of business to create value by restricting production. Too often labor representatives, by focusing their attention on the division of the spoils, would be persuaded to join business in using the scarcity technique in return for higher money wages. This is indicated by the experience of some of the German cartels in which business and labor combined to exploit the consumers—i. e., the owners and workers in other industries—and of some American cities where organized labor and organized business in the building industry have combined for similar exploitation. The inclusion of consumer representatives along with those of business and labor would insure a direct pressure for the full use of resources.[3]

The chief disadvantages of such a set-up would be (1) that the diverse interests are not equally strong as pressure groups, so that the greater and more effective organization of business would make business interests still dominant; and (2) that the veto power in the hands of the government and the necessity of getting agreement on the part of conflicting groups may lead to stalemates in particular situations—a disadvantage which might also present itself if the government represented the nondominant groups in a partnership with business.

6. Whichever method of determining the key elements of industrial policy is adopted, problems distinctive to each solution must be met.

(1) If the Government is to do the whole job, an effective enforcement machinery must be developed; it would be essential to secure public acceptance of the idea that government should exercise such power over industry; the problems inherent in centralization would have to be solved. The direct impact of conflicting groups upon the Government could be minimized by the creation of an advisory body for each industry within which the conflicting interests were represented.

(2) If the Government is to represent the nondominant economic groups, the problem becomes that of pitting the political power of these groups against the economic power of the business group. This would call for a definite realinement of political parties on the basis of economic interests.

(3) If the interests are to impinge on each other, labor and consumer interests must be strengthened as pressure groups, presumably through the building up of their organizations. Such organizations would gain a status which they do not now have by being given a constructive roll to play in the making of industrial policy, and the Government might properly take positive steps to encourage their growth, just as it did in the case of business organizations in the first year of N. R. A. and in the case of farmers through the encouragement of farm cooperatives and the farm-extension service. As the interest groups became more nearly equal in power, their decisions would tend increasingly to be in the public interest.

The danger of stalemate is inherent in any solution which contains the element of democracy and which avoids both a positive dictatorship and the complete atomization of industry necessary to make laissez faire operate effectively.. By shifting the major emphasis

[3] Determination of industrial policy by either labor or consumer groups alone, or by a combination of the two, is not a realistic possibility in America at present, short of a violent revolution.

in industrial relations from the division of the spoils to making the economic machine work—a shift which is basic to the whole technique here described—a chief reason for stalemate would automatically be removed.

7. The choice among these possible ways of determining key elements of industrial policy should be made with reference to the basic requirements for a satisfactory American program. It should be geared to the conditions established by modern technology; it should leave existing economic and governmental organization intact as far as possible; it should provide the minimum centralization compatible with necessary coordination, and avoid as far as possible bureaucracy and political influence; it should secure industrial decisions in the direction of the optimum use of human and material resources and a balance of economic interest among various groups; it should meet the traditional American demands for liberty, opportunity, and democracy as far as the need to provide security will permit, and it must be compatible with the Constitution. (See appendix K.)

APPENDIXES

APPENDIX A. THE BREAK-DOWN OF THE MARKET MECHANISM

Underlying the many-sided demand for the abandonment of laissez faire is the disruption of the law of supply and demand which has resulted when the power to determine certain elements of industrial policy has become lodged in the hands of individuals instead of lying with the impersonal market mechanism. This development, arising largely out of the concentration of economic activity into great enterprises, has not been recognized by traditional economists, yet it is of the greatest significance. To understand its full implications it is necessary to see clearly how it affects the basic elements in the traditional theory.

The whole structure of traditional economic theory is built on the "law of supply and demand"; i. e., the assumption that supply, demand, and price will so adjust themselves in the market that supply and demand will be equal at the price which is arrived at. On the basis of this law was built the picture of how our whole economy was supposed to work. Under the pressure of individual self-interest, the supply, the demand, and the price for each article and service was supposed to adjust itself, so that the right amount of each thing would tend to be produced at the right price. Thus the operations of the free market world tend to produce the optimum use of human and material resources.[4]

According to this theory, the mechanism of the market was impersonal and the whole of industrial policy was determined by the market—both the amount of a thing produced and sold, and the price at which it was sold. Industrial policy was the result of the individual decisions of a large number of buyers and sellers. The business policy of individuals interacted so as to produce industrial policy, but no one individual or enterprise had significant control over any element of industrial policy. This operation of the free market is clearly shown in the case of most agricultural products (before A. A. A.). The individual farmer produced wheat or not, depending on what he expected the price of wheat to be, and offered his produce for what it would bring in the market. He had no significant control over either the total amount of wheat produced or the market price of wheat. His contribution to the total supply was too insignificant to give him any control over industrial policy.

But this theory was set forth by Adam Smith to explain the workings of an economy quite different from that now existing. He was dealing with an atomistic economy in which the great bulk of economic activity was carried on by independent artisans, by one-man businesses, or by business units so small that they could be treated for most purposes as though they were one-man affairs. Most of agriculture still corresponds to this Adam Smith picture, but today a large part of industrial activity has been concentrated into units so large that certain important elements of industrial policy are now made by individuals and no longer by the impersonal market mechanism. In 1931, 200 corporations controlled approximately 54 percent of all nonfinancial corporate wealth. If we leave out the highly

[4] This statement, through greatly oversimplified, gives the essentials of the laissez faire philosophy. There is no need at this point to go into just what constitutes the "right" amount or "right" price for things.

concentrated fields of railroads and public utilities and the relatively unconcentrated construction and distribution industries and confine our attention to manufacturing alone, we still find a very high degree of concentration.

In 1931 the 200 largest manufacturing corporations controlled over 55 percent of all manufacturing corporate assets, and over half of all manufacturing assets, whether incorporated or not. At least half of the gainfully employed population of the country were engaged in industries in which control over certain major elements of industrial policy were in the hands of individuals.

In some of these industries, the business policy of one or a few big enterprises actually determines essential elements of industrial policy. Thus, the management of the Aluminum Co. of America can control, within limits, either the volume of pig aluminum sold in the whole industry or the price at which it is sold. It cannot control both of these elements of industrial policy, but the control of either element by a small group of individuals is contrary to the assumptions underlying the laissez faire philosophy of automatic market adjustments. In the regulated monopolies, an element of industrial policy—railroad and utility rates—is under the combined control of a group of business executives, a governmental commission, and the courts. In industries such as automobiles or agricultural implements, a few big companies so dominate the field that, within limits, they can control either prices or production. There is ample evidence that this partial control over industrial policy is very widespread throughout industry and does not require monopoly conditions or collusion to bring it about. Competition of a sort may be very active as in the case of the four big tobacco companies or the big automobile companies, yet it may be of such a character that the big companies can choose as individuals to establish either price or volume of production and, because their operating conditions are similar and they sell in the same market they tend to establish and hold the same price and make their production conform to the sales at that price. It should be noted that this partial control over industrial policy does not necessarily mean that the big enterprises make too much profits. The matter is vastly more fundamental than that.

The danger of industrial policy making by individuals is that policies will be adopted which interfere with the working of the economic machine and thus defeat the effectiveness of a laissez faire policy on the part of government. It is clear that during the depression the effect of falling demand has been quite different in the atomistic and in the concentrated industries. In the atomistic and highly competitive industries like agriculture, the volume of production and sales have been maintained while prices have dropped. Each producer has continued to use his productive facilities to the full, selling the product for what it would bring. Such industries have thus acted according to traditional theory. In more concentrated industries, however, the depression drop in demand has been met primarily by holding prices and reducing production. In the case of agricultural implements, the prices reported to the Bureau of Labor Statistics for 20 agricultural implements declined on the average only 6 percent, yet production and employment in the industry declined 80 percent.[5] Case after case could be cited in

[5] Some further reduction over quoted prices was made in certain cases through giving credit for abnormally low prices for certain agricultural products, but this does not affect the principle that the primary effect of the depressed demand was on production, not prices.

which the prime reaction to depressed demand was to curtail production and not to lower prices. Here we have evidence, not only of the power to choose between lowering production and lowering price but also evidence that the power tends to get exercised in the direction of lowered production and not lowered price.

This reduction in production is of the utmost importance because it is, in itself, destructive of the workings of the economy. A reduction of production throws workers out of employment, reduces their money income, and further reduces the demand for goods without in any way increasing the income or buying power of anyone else either by increasing their money incomes or reducing prices. If all industry operated in this way, the result of an initial drop in demand would be an overpowering depression, unless some other factor, monetary, or otherwise, intervened to prevent the initial drop in demand from destroying demand entirely. Only if the power to choose between lowering price and lowering production was consistently used to lower prices to the point where full use of machine and labor resources was reached (regardless of how many bankruptcies were produced) could we expect the results predicted for a policy of laissez faire to be reached. Yet it can be shown both in theory and in practice that the power to choose between reducing production and reducing price to meet lowered demand will on the whole tend to be used to hold price and reduce production where it is exercised to maximize profits or minimize losses. Thus, industrial policy making by individuals is not only contrary to the assumptions of laissez faire but it tends to produce results quite opposite to those necessary for a harmoniously functioning economy.

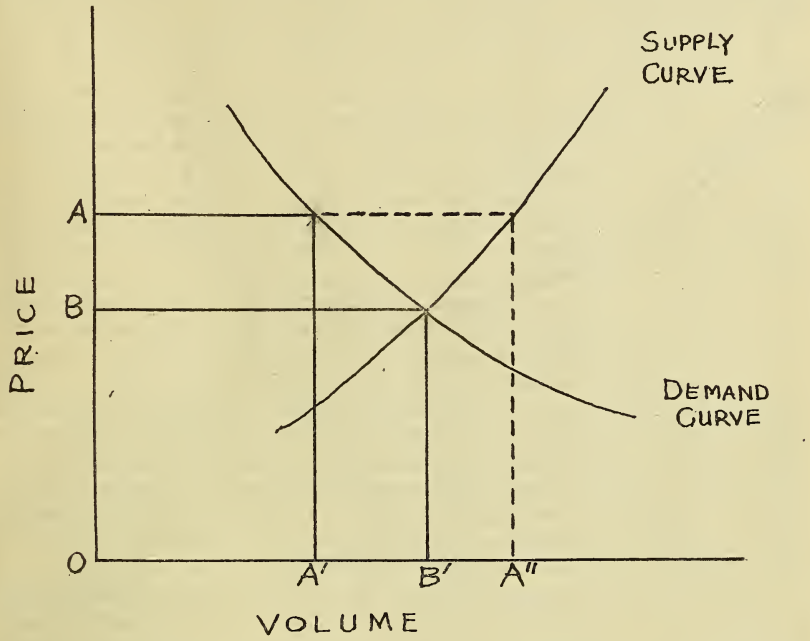
APPENDIX B. THE DISRUPTION OF THE LAW OF SUPPLY AND DEMAND

The failure of traditional economists to recognize the extent and harmful effects of industrial policy making of individuals is easily understood when the law of supply and demand is examined in reference to the power of individuals partially to control industrial policy. According to the law, the supply and the demand for an article are supposed to be equated at a price. Unfortunately, the meaning of "supply" is today most ambiguous. Is "supply" "the amount of an article sold at the price", or is it "the amount which would be forthcoming at the price if someone would buy it at that price"? In a truly atomistic economy, such as Adam Smith was discussing, these two amounts would be the same so that to him there was no ambiquity. But where concentration or other factors have entered in so that individuals can, within limits, control either price or volume of production, there can be a wide difference between these two amounts. Thus, General Motors might set the price for 1934 Chevrolets at $500 f. o. b. Detroit and sell only 500,000 cars. Yet the company might be willing (and eager) to produce and sell 1 million cars at the price of $500 if buyers were available to take the extra cars off their hands at that price. The amount sold at $500 would thus be 500,000 cars. The amount forthcoming at $500, if only buyers would come forward and buy, would be 1 million cars. Which of these figures constitute supply?

The traditional economist calls "the amount sold" the supply when he is dealing with actual markets. If he called "the amount

forthcoming if there were takers at the market price" the supply, then it would become at once obvious that in a large number of industries today supply and demand are not equated by price. But when the traditional economist comes to defend the general policy of laissez faire, he unconsciously shifts his ground and means by supply "the amount forthcoming at a price" rather than the amount actually sold. Only as price is adjusted so as to equate "the amount forthcoming at the price" and the demand at the price will the economy work as the traditional economists assumed.

The gradual widening of the difference between "the amount sold" and "the amount forthcoming" has bit by bit disrupted the working of the old law of supply and demand. Today, instead of having



"the amount forthcoming" and demand equated by price, we have "amount sold" and demand equated at a price.

If we translate the law of supply and demand into terms of production (assuming all produced is sold), the two meanings of supply would be "the amount produced" and "the amount that would be produced if there were takers at the price set" or what we can refer to as "willing capacity." [6] Today, in a very large number of industries, individuals have sufficient control over industrial policy so that prices tend to be held in a depression and actual production is allowed to drop way below "willing capacity" for considerable periods. Production is equated to demand at the price set rather than having supply and demand equated by price.

The essential difference can be indicated in the symbolism usually employed by economists.

In the above diagram the customary supply and demand curves are indicated. If price was such as to equate supply and demand the

[6] For any manufacturer who was willing to produce and sell at the current price more than he was actually producing, "willing capacity" would exceed amount produced.

price would be *OB* and the amount sold *OB'*. If the particular producers were in a position to restrict production so as to hold up prices, the price might be *OA* and the volume sold *OA'* while the "willing capacity" at the price *OA* would be *OA''*. Thus where the amount sold (*OA'*) and the "willing capacity" (*OA''*) are different amounts, the price is not established according to the law of supply and demand on which a laissez-faire policy has been based.

APPENDIX C. INFLEXIBLE ADMINISTERED PRICES VERSUS FLEXIBLE MARKET PRICES

The fact that the prices of a great many commodities tend to be extremely rigid has only come into prominence in very recent years. The full significance of this rigidity is only beginning to be understood.

A study of the behavior of prices reveals that there are two quite different techniques of price making, each dominating a section of the market. The first involves prices made in the market and highly flexible. The second involves prices made administratively which tend to be inflexible and by their nature to be changed infrequently.

Most economic studies have dealt only with the magnitude of price change and not with the frequency of price change.[7] The varying degrees of price change during a depression have been recognized, but these differences have been attributed to differences in the characteristics of either supply or of demand (differences in the slopes of the supply or demand curves). While the difference in prices might be explained by this factor, they might equally be explained by the existence of administered prices as is suggested by the infrequency of price changes. Undoubtedly both factors have been at work, though the first two charts at the beginning of this report suggest that the factor of administration has dominated during the depression. Otherwise, one would not have found the striking correlation between frequency of price change and magnitude of price drop from 1929 to 1932. It is well known that the demand for food is relatively inelastic while that for automobiles is much more elastic yet production has been curtailed most in the latter industry.

The difference between the two methods of price making can be clearly seen in the case of concrete examples. The farmer sends his hogs to market or carts his carrots to town in the early morning. The price that he gets for those hogs or carrots depends upon market conditions—how many other farmers have sent in hogs or brought in carrots that day, and how many people are there to buy. The prices are the result of a bargain struck under these conditions. When the farmer sends his hogs or brings his carrots, he does not know just how much he is going to get for them. He is sure that they will all be sold, because he is not going to pay the freight to have the hogs shipped back to him, or drive home with a load of carrots to rot on his hands; but he cannot tell what the price is to be.

Contrast the fate of a Chevrolet with the fate of a hog. In the offices of General Motors, the managers decide on the 1935 price. They print their price lists and mail them out to their salesmen. They may arrange ahead of time to buy the materials which go into the Chevrolet at prices for materials which promise to give them a profit on each

[7] Frederick C. Mills, in The Behavior of Prices, has distributed certain price series according to frequency of price change but presented the statistical results without drawing conclusions. His figures showed the same U-shaped distribution.

car at the price which they decide upon for the car. They do not know how many Chevrolets they are going to sell; but they do know at what price they will be sold. The contrast between the price of the farmer's hogs or carrots and the price of a 1934 Chevrolet is the contrast between the two kinds of price determination.

The essential difference between the two types of prices is that one represents an equating of supply and demand by price while the other represents the equating of production and demand at a price. (See appendix B.) The first type of price facilitates economic adjustment, the second tends to interfere with adjustment by bringing a drop in production and purchasing power when demand drops.

It will be said by many that this drop in production occurs primarily in the capital-goods industries and not in consumer-goods industries. It is undoubtedly true that a greater drop in production has occurred in the capital-goods industries. But it is also clear that prices in those industries have been very much more rigid. The usual expectation of the economist would be that in general where demand had dropped most prices also would have dropped most. The exact opposite appears to have been the case, for consumption goods, particularly agricultural products, fell markedly in price during the depression while capital goods did not fall in anything like the same proportion. Also, where the prices of consumption goods were held rigid, the drop in production was more nearly like that of the capital goods industries.

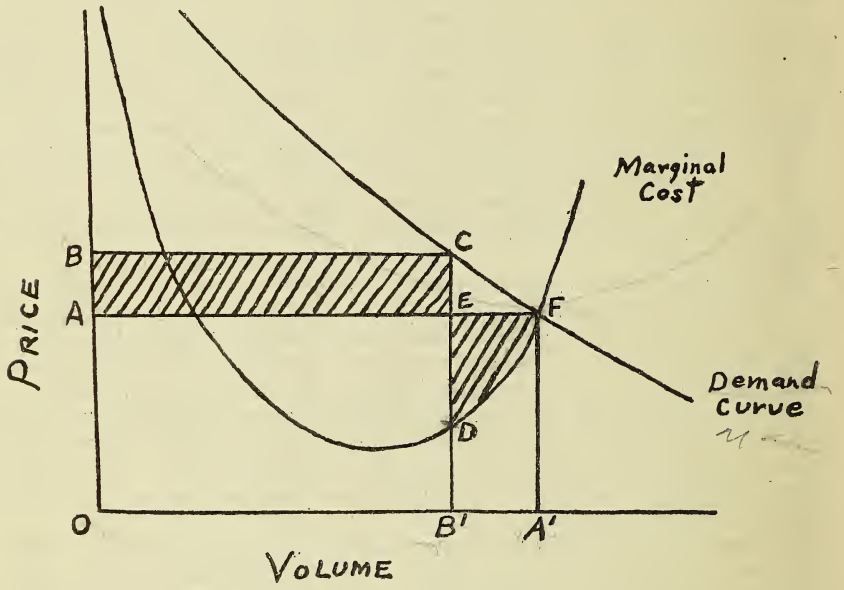
It may also be said that the failure to reduce prices has been due to the increased unit cost of production resulting from the burden of overhead. Once the business man has made the initial decision to hold his price which prevents a maintenance of production, increased unit costs exert a progressively strong pressure to maintain and accept a progressively lower level of production. This factor would not enter into price determination if industrial policy were really determined in the market. Though practically the whole of the farmer's cost is overhead, the market does not consider such costs in the price which it gives him.

The importance of these two types of pricing processes lies not only in the control over industrial policy which is reflected in rigid prices, but in the fact that all adjustment to changing economic conditions which are made through price are made in the area of flexible prices, thereby destroying the price relationships between the flexible-price and the rigid-price industries. The adjustment of production instead of price in the inflexible areas aggravates the initial price adjustment in the flexible industries by reducing purchasing power and throws the burden of further price adjustment on the flexibly priced commodities. This situation can be clearly seen in the effect of the depression upon agricultural prices and the destruction of the price relationship between agricultural and industrial goods. It is also seen in the fact that during the depression the total income of all farmers and the total income of all industrial workers dropped in approximately the same proportion, but the drop in farm income reflected a drop in prices while the drop of workers' income reflected primarily loss of employment.

The net result of administered prices under a laissez faire policy is thus to impair or destroy the adjustability of the economy.

APPENDIX D. THE REQUIREMENTS OF A FREE MARKET

In order that a free market should exist so that prices will be made competitively in the market the most important single requirement is a sufficient number of buyers and sellers in the market so that no one buyer or seller is in a position to affect prices sufficiently by changing his own volume of purchases or production to make this a factor in making his own calculation. No individual farmer producing cotton will affect the price of cotton sufficiently by increasing his production to make it worth while even to consider the effect of his action on price. On the other hand the management of General Motors know that if they increased their production appreciably, an appreciably lower price would be required to dispose of their output and since the lower price would affect their receipts on each item sold,



they would have to balance carefully the lower price on the cars they would otherwise sell at the higher price and the possible profits on the added cars they would sell at the lower price.

This can be shown clearly with the customary marginal cost and demand curves.

Under freely competitive conditions it is assumed that each producer will produce up to the point where his marginal cost will be equal to or just short of the price, since each producer is supposed to be unmindful of the effect of his action on prices. This would mean that in the situation represented by the above diagram, the single producer will produce OA′ units and sell them at a price OA. (Such a result would require a demand curve for the particular producer's product with a much more gentle slope than is indicated above.) However, where the particular producer was a major factor in the market, perhaps one of three or four big competing enterprises, the producer would have to consider the effect of his own action on the price prevailing. Thus, if he curtailed his production from A^1 to B^1 and

would as a result lift the prevailing price from OA to OB then he would have to consider whether the profit indicated by ABCE was greater than the profit indicated by DEF. If the first were greater, then it would pay him to reduce production. His most profitable action would, of course, be conditional by the action of his competitiors, but the presence of three or four independent and active competitors would not eliminate the possibility of gaining advantage by reducing production though the action of competitors might reduce the range of profitable curtailment. In such a market the producer would certainly have to consider the effects of his own production policy on price.

If administered prices were present in an industry this would be prima facie evidence that the free market, in the sense posited in the laissez faire philosophy, did not exist. If administered prices are present in a major part of our economy and since they exist in a great many areas which are not monopolized but in which there is active competition between a few units, it is clear that they do not necessarily reflect monopoly conditions but something more wide-spread—namely, the reduction in the number of competing units in many industries.

APPENDIX E. NOT A PROBLEM OF GOVERNMENT OWNERSHIP VERSUS PRIVATE OWNERSHIP, BUT OF THE DISTRIBUTION OF CONTROLS

In the modern corporation, "private property" in the traditional sense, i. e., in the sense that an "owner" has power over, responsibility for, and interest in his property, does not exist, for the interests and controls which have been combined to constitute traditional ownership have become lodged in different hands. In the modern corporation, most of the ownership interests are in the hands of stockholders, but where stock is widely dispersed, power does not lie with the stockholders but with the directors and officers of the corporation. The ordinary stockholder can do as he pleases with his share of stock—sell it, hold it, or burn it up—but over the corporate enterprise as such, and over its physical property, he has practically no control. The control exercised by corporate management, on the other hand, does not rest on ownership, for in most of the great corporations the controlling group holds a negligible proportion of the stock.

This situation makes it possible to shift threads of control from one place to another without changing either the character or the locus of ownership interest. This means that the threads of control relating to business policy and those relating to industrial policy could be sorted out and the latter relocated, leaving ownership interests untouched.

The separation of control from interest in respect to ownership is only one of the ways in which modern economic organization has made this separation between interest and control. Under the factory system, the worker surrenders much of the control over his own activity during working hours. So long as the factory enterprise was small and one of a large number competing for the services of workers, the worker still retained an important measure of control, for he could always transfer to some other enterprise. But as the administrative units have become ever larger, the direct control of the worker over

the conditions under which he works has become less and less. To some extent this loss in direct control has been counterbalanced by a measure of control through labor organization, but, for the most part, workers have ceased to be in a position to exercise an important element of control.

The consumer, likewise, has lost much of the control which he had through bargaining as the business units with which he deals have become less numerous and more powerful.

Thus, the shift of large segments of economic activity from coordination through the market to coordination through administered activity has gradually sucked controls over industrial activity away from the three parties mainly at interest, the security holders, the workers, and the consumers. It has placed this control in the hands of administrators, nominally responsible to the one group, the security holders, but factually responsible in all too many cases to no one. Such a concentration of controls leaves the investors, the workers, and the consumers with great and basic interests in industrial activity but with a minimum of control over it.

In that major part of industry which is dominated by modern corporations, the crucial problem is not the transfer of ownership or of any other interest, but rather the locus of control over industrial policy.

APPENDIX F. THE PUBLIC INTEREST

It is a part of the American tradition that it is the function of the Government to protect and foster the public interest. In any concrete situation it may be and usually is most difficult to determine what action is in the public interest. Yet no one would claim that the Government should be the tool of any special group. Even when special interests seek action favoring them, they word their arguments in terms of the public interest. All guides to action on the part of Government should therefore start with the public interest.

The discussions of the public interest during the eighteenth and nineteenth centuries centered around the assumption that the political and the economic spheres should be and could be kept wholly separate and that the free market would supply all the coordination and control of individual economic activity necessary to bring the optimum use of human and material resources. It was therefore held that the public interest called for a policy of laissez faire and all matters of immediate policy have been discussed with this basic element of policy already determined. As a result, there has been almost no discussion of what would constitute the public interest as to questions of immediate policy if a change in the character of economic activity necessitated a change in basic policy away from complete laissez faire.

In considering what would constitute action in the public interest in cases where the market mechanism was being supplemented by administrative action, light can be thrown by examining the reasons why a policy of laissez faire was formerly considered in the public interest. It was assumed that under a policy of laissez faire each individual would be fully employed—to the extent of his desire—in producing for the market and that as a result of the price mechanism, the individual would receive for his activity a corresponding volume of the product of some other worker. Likewise, so long as capital

was scarce relative to its effective uses, investors would receive a return on their investment related to the degree of scarcity of capital.[8] As a result of the operations of the free market under a policy of laissez faire, a balance between the conflicting interests of buyer and seller—of worker, investor, and consumer—was supposed to be established. If perfect balance throughout were established, it would mean that no new worker would find an appreciable advantage in going into one industry or employment rather than another (except as he had peculiar qualifications), no new savings seeking investment would find an appreciably higher return commensurate with the risks in one industry than another, and no new consumer coming into the market would find appreciable advantage in buying from one group of producers rather than from another except as special qualities of commodity or service were required. Finally, the average return on capital would correspond to the actual scarcity of capital in relation to the possible uses. If a policy of laissez faire actually produced the above results, we should have, not idle men and idle machines, but the optimum use of human and material resources. Presumably a laissez faire policy was regarded as in the public interest because of these promised results and though a general laissez faire policy has failed to produce the expected results, we may accept the basic objectives sought by that policy as in the public interest.

This means that the basic objective in making industrial policy in the public interest would be to bring a coordination and balance of the conflicting interests of the same character which a laissez-faire policy was supposed to bring. Thus, if the size of the cotton crop has to be established administratively, the basic aim of public policy should be to make a decision which would represent an appropriate balance between the conflicting interests of cotton raisers, cotton manufacturers, cotton-mill labor, and cotton-cloth consumers.[9] Here public interest calls for the finding of the common interests and the balancing of the conflicting interests in order that the results of economic activity will more nearly conform to the balance which the policy of laissez faire was formerly expected to produce.

To the extent that industrial policy is to be made administratively, the major interests involved in the system of interchanges will resolve themselves into three major categories: The business interest primarily seeking more money income for less use of capital, the labor interest primarily seeking more money wages for less work, and the consumer interest primarily concerned with obtaining more or better goods and services for less money. The farmer interest will sometimes be a producer's interest, either as worker or owner or both together; at other times it will be a consumer interest. The public interest, therefore, calls primarily for a balancing of the business, labor, and consumer interests which together constitute industry. This conflict of interests is clearly recognized in the three advisory boards attached to the N. R. A.—the Industrial Advisory Board,[10] the Labor Advisory Board, and the Consumers Advisory Board—and in their equal representation on the Advisory Council. The conflict is only partially recognized in the great departments of the

[8] Differential returns to particular investors would reflect the differences in risk. The average return was expected to reflect only the scarcity of capital.

[9] Other interest groups could be included as the transporters of cotton, whether railroad or truck, etc., but the major interests are covered above and the minor interests would usually only supplement one or another of the major interests.

[10] It should be more properly called the "Business Advisory Board".

Federal Government, the Commerce (business) Department and the Department of Labor. The Department of Agriculture combines the three interests for a large part of our economy which still operates on an atomistic basis.

The lack of any department of the consumer undoubtedly grows out of the recurrent confusion between the public interest and the consumer interest. It is said that since everyone is a consumer and everyone is the public, therefore the two are the same. This is true with regard to the most general problems. But when any specific problem comes up, it is at once clear that for all the population the interest affected in making policy is not their consumer interest. The workers in, let us say, the shoe industry are interested in higher wages, yet the consumer interest, that is, the interest of all buyers of shoes except those making shoes, is in lower prices and presumably lower money wage rates. The policy involved is really one of the ratio of exchange in part between the workers in the shoe industry and the workers in other industries. To say that the public interest and the consumer interest were the same, i. e., that the public interest excluded the shoe workers would be just as partial and unproductive of an effective operating balance in the economy as it would be to say that workers in the shoe industry alone constituted the public and that wages for the particular industry should be set wholly without regard to the interests of the buyers of shoes. The public with respect to any particular industry includes both producers and consumers, and the public interest requires the balance of these conflicting interests.

APPENDIX G. THE BUSINESS INTEREST

Although much has been said here of the bad effect on the economy of industrial policy made by business men and of the necessity of counteracting this tendency to make bad industrial decisions, yet industrial policy determined in the public interest would actually be more to the ultimate interest of business men than the policy which they themselves would set.

To question the quality of industrial decisions made in the interest of maximizing profits or minimizing losses is to condemn neither profits as such nor the men who make such decisions. It is probable that if decisions had been so made as to properly balance the interests of investors, workers, and consumers during the last 5 years, business profits would have been very much greater and business losses would have been less, or would have been turned into profits. This would have been accomplished, not by taking from the money income of workers or from the money outgo of consumers but rather by greatly increasing the national income available for distribution.

The men who made these decisions were not violating the rules of the business game. On the contrary, the very gravity of the situation arose out of the fact that they did, for the most part, play according to the rules of the game. Unfortunately, the play according to the rules of the business community—rules laid down for an atomistic economy—brought economic death to innocent bystanders.

The increased power placed in the hands of single enterprises has made the rules of the business game almost as inappropriate as the Marquis of Queensberry rules would be to a fight in the pit of Madison Square Garden between two armored tanks mounting machine guns.

In both cases the power of the contestants to do damage by their actions has extended far beyond their immediate sphere. The remodeling of the Ford product brought economic depression to the whole region of Detroit just as effectively as the machine guns of one of the contestant tanks could mow down a large section of the audience. Even where some outstanding men sought to break the rules of the business game by making industrial policy, not solely in the interests of the immediate profits of their enterprise, but in the public interest, their actions were nullified by the actions of the mass of other business men.

In changing the rules of the game, the problem is not unlike that of the crowded excursion boat which capsized when a large body of excursionists rushed to one rail to see what was happening. In both industry and excursion boat rugged individualism works well so long as a multitude of different individuals decide individually to do different things. Each passenger can walk where he chooses so long as the passengers choose to scatter over the ship. But when most of the passengers rush to one rail great damage is done. Of course, we might say that God is just and drowns those foolish enough to rush to the rail. This is exactly what the traditional economist says of business. Yet the boat takes down with it all its passengers, whether they rushed to the rail or not, and so does business.

In the case of the excursion boat, a line of obstructions down the center of the boat and a few deck stewards trained to break up any undue rush would be sufficient to prevent a recurrence of the upset without the necessity of interfering with the passengers' normal individual liberty to walk around the deck as they pleased. The individual business man has everything to gain from having his actions impeded or deflected at the points where they are likely to produce destruction or economic collapse.

APPENDIX H. LABOR INTEREST

The effect of pressure from labor upon industrial policy will vary with the particular aspect of labor interest which its representatives are pressing at any time. In each industry, labor has two interests: (1) An interest in full and steady employment which calls for the full and continuous operation of that industry; and (2) an interest in higher money wages which calls for a division of the money spoils more nearly in its favor. It has usually no consumer interest in its own industry, although the individual workers have an important consumer interest in other industries.

American labor organization (except for the revolutionary unions) has been built upon the principle of securing a favorable division of the money spoils through collective bargaining. It has not been primarily concerned with maintaining employment or protecting real wages through price. In the face of rising prices, its pressure has been to raise wages to cover those prices rather than to keep prices down. Moreover, where labor has been represented by the spokesmen for exclusive groups of workers, as in the building trades, its interest in high money wages for its own group of workers has led it to disregard the interests of the rest of labor and to agree to or to force industrial policy which often curtails employment and raises prices.

In only a few cases—e. g., the Amalgamated Clothing Workers or the role played by organized labor in Josephine Roche's Rocky Mountain Fuel Co.—has labor shared in industrial policy making beyond seeking its share of the spoils. The N. R. A. has given labor a new role. The spokesmen for labor, whose experience has frequently been that of representing an exclusive labor group rather than the whole body of labor in the industry, have not infrequently carried to their new policy-making responsibilities the attitudes which have gone with collective bargaining. Labor representatives are always in danger of being persuaded by the offer of a slightly larger share in the spoils (witness the agreement of labor to restriction of production in the cotton-textile industry) to accept a policy which is neither in the interest of labor nor the public.

The problem of building labor into the structure of industry as a participant in the making of industrial policy thus involves a shift on the part of labor representatives from almost exclusive preoccupation with the sharing of the money spoils by any exclusive group of workers to the increase in the total spoils to be distributed, not only in money but, through low prices, in goods. It means a primary regard for the interest of the whole body of workers in employment and real income for all. It involves the reorienting of labor organization to a new kind of job, the technical training of its representatives which will enable them to recognize labor's interest in a complex industrial situation, and the recognition of the importance of the interests of workers as consumers. This does not mean that collective bargaining over a division of the spoils does not remain a function of labor organization, but only that a new responsibility of sharing in the making of industrial policy needs to be assumed.

APPENDIX I. THE CONSUMER INTEREST

The consumer interest as an organized interest administratively represented is new to both economic and political organization in America. The Consumers Advisory Board of N. R. A., the Consumers' Counsel of A. A. A., and the Consumers' Division of the National Emergency Council are the first specifically consumer agencies to be set up in Washington. Except for the relatively weak consumer cooperative movement, and the small membership organization, Consumers' Research, organized consumers have played no significant industrial role.

Under traditional laissez faire conditions, the consumer had a large share in determining the course of economic activity through his purchasing here or there, buying or refraining from buying. Indeed, the primary justification for a system of laissez faire has been the assertion that if each individual were allowed to produce and sell freely in the market in the interest of his own profit, the net result would be a system which approached the ideal from the point of the consumer. The great advantage of the traditional thesis was the perfect and reasonable service which it promised the consumer. In many cases the consumer has been deified as the arbiter of industrial policy, since the loss of his patronage was supposed to be so immediately effective in causing price readjustments.

Undoubtedly, in the days of small enterprises, there was much validity in this picture. The consumer was in a position to shift his

trade from one competitor to another offering the same article, to come face to face with the seller and bargain with him on relatively equal terms, to know perhaps as much as the seller about the qualities of the article offered for sale. The consumer could exercise a very real control over production and over the prices at which sales were actually made. So long as the organization of economic activity was brought about primarily through the free market, the consumer was in a position to carry his share in controlling the economic process.

The development of administrative power in place of market coordination has greatly weakened the position of the consumer. The concentration into great units has steadily reduced the control which the consumer can exercise over enterprise activity through the market place. The consumer is faced with administered prices, a "take it or leave it" policy, and only a few sellers of each particular product. No longer can he come face to face wth the owner of the enterprise with which he is doing business. Nor has he a multitude of sellers whom he can pit one against the other for his business. To an increasing extent he is in an unfavorable bargaining position and is forced to take what is offered at the price at which it is offered or go without.

His position is further weakened by the barrage of advertising to which he is subjected. In a great number of cases, moreover, he has to buy commodities of whose characteristics he can know little, yet whose qualities are well known to the seller or manufacturer. Unlike like consumers in a simpler economy, the modern consumer meets the bulk of his wants through purchases and tends to be unfamiliar with the actual making of the commodities which he buys. Yet these commodities are to an increasing extent made of highly fabricated materials about which science has given the manufacturer a wealth of knowledge. Thus, not only is the consumer no longer in a position to bargain face to face with the seller and share directly in the determination of price, but he is bludgeoned into buying something about which he knows vastly less than the seller or manufacturer. Though the consumer is frequently hailed as the objective of all attention, the effect of the shift from coordination of activity by the free market to administrative action has steadily reduced the direct influence of the consumer on price-and-production policy.

Weak though the consumer is, his point of view would seem to be an essential ingredient in the making of industrial policy, for his interest is in the very things which constitute industrial policy, namely, the production and distribution of goods and services, while business interest remains preoccupied with creating value.[11]

It has been traditional among both economists and business men to view the economic process as a process of production, looking down the stream of goods and regarding consumption as the last step where the goods go over the Niagara Falls into the maw of the consumer. Actually, there is just as great logical justification for describing the whole economic process as one of consumption. We consume raw materials, we consume labor, and each step in the process is a step in the consumption of available resources. Here the point of view adopted is at the lower end of the stream of goods looking upstream. Goods move toward the observer not away from him.

[11] When labor organizations act in the interest of wages rather than of employment, they are exerting pressure toward value rather than toward production.

These two opposing points of view do not change the character of the economic process, but they do cast into the foreground different aspects in that process and make for a quite different emphasis. To the producer-minded, the first thought in an industrial program is: "How can the existing productive instruments be made to return value?" To the consumer-minded, the first thought is: "What goods are needed for ultimate consumption?" To the producer-minded, the curtailment of production, limitation of hours, and lifting of prices can appear to be a satisfactory solution to a specific problem. The person habitually adopting the consumer point of view will never be misled into producing scarcity of goods.

In meeting any specific situation, it is essential to recognize that the public interest and the consumer interest are not identical. The consumer interest is only one of the many economic interests involved in our economy—it is the interest of buyers rather than that of investor, workers, producers, sellers. To confuse the public interest with the much more specific consumer interest is to lose sight of the even-handed balance which is implicit in the term "the public interest", even though all persons are consumers and all persons are also the public. The lack of identity between consumer and public interests is apparent in any specific situation where the difference in interest between the various groups involved is clear, and the general identity of those who constitute the body of consumers and the public does not obscure this difference. Thus, if the size of the cotton crop is under consideration, the consumer interest and the cotton farmer's interest may be in conflict. Yet both groups together constitute the public. To place any Government official in the position of having to represent both the public interest and the consumer interest is to make him both judge of all parties and counsel for one of the parties at interest. The confusion between consumer and public interests has made the N. R. A. fail in the past year to give such weight to the consumer interest in arriving at its decisions as would best serve the public interest to which the N. R. A. is devoted.

The organization and effective representation of the consumer point of view could take two quite distinct forms—the organization of individuals as consumers and the organization of the consumer interest. The difficulty of organizing consumers as individuals has often been pointed out. Nobody is a consumer, because everybody is a consumer; everybody is also a producer and people are more likely to act in their interest as producers than as consumers. The weakness of the consumers' cooperative movement in the United States is frequently cited as evidence of the failure to get organized consumer activity.

Much more feasible is the organization and representation of the consumer interest, for existing organizations which are not specifically producer organizations—e. g., professional groups, engineers, chemists, etc., or women's organizations—can function in the interest of their members as consumers, and even definitely producer organizations, such as farm or labor organizations, can act for their members in the many specific situations in which the interest of their members is primarily a consumer interest. Most importantly, the technicians are the logical representatives of the consumer interest, since their interest and skill are devoted to producing goods and services, not values.

APPENDIX J. THE FARMER'S INTEREST

The farmer is the prototype of the enterprise unit to which laissez faire applied and for which the market tends to operate most nearly according to the pattern indicated by that philosophy. If it were not for the concentration in other fields, it is quite probable that industrial policy in the field of agriculture could be left entirely to the market. As it is, the farmer has been forced to deal with large organized units, both in buying agricultural implements, fertilizer, etc., and in selling to packers, milk distributors, tobacco manufacturers, sugar refiners, etc., so that he is no longer connected to the ultimate consumer by a free market. The flexibility of his prices has made him bear the brunt of price adjustments, while as a purchaser of industrial goods he has been confronted with a policy of high price maintenance. The market for his products has at the same time been curtailed by the destruction of the purchasing power of the unemployed resulting from the industrialist's policy of curtailing production. It is, to a large extent, his relations with the rest of the economy rather than the problems of his own industry which place the farmer in a difficult position.

It is quite probable that, once recovery has been brought, and if a suitable industrial policy can be established in the processing and marketing industries, most agricultural problems with respect to policy can be left to the market, except as techniques are developed for insuring against crop failures, facilitating the removal of submarginal land from cultivation, etc.

The farmer has a vital interest in the industrial policies of the processing and marketing industries and in the industries making the things which he buys and would need to be represented either as farmer or as consumer on any bodies making policy with respect to those industries.

APPENDIX K. AN AMERICAN BASIS FOR ECONOMIC REORGANIZATION

1. Any satisfactory technique for the making of industrial policy must be relevant both to the factual situation and to American traditions.

2. The facts to be met are:

(*a*) Laissez faire has failed; i. e., the market mechanism has broken down.

(*b*) The banking and money system has failed to meet the needs of modern technology and modern industrial organization.

(*c*) Modern technology makes possible a high standard of living for all.

(*d*) Modern technology requires great administrative organizations.

(*e*) These industrial organizations must be coordinated and their operation in the public interest insured.

3. The American tradition demands that a solution be sought which preserves the maximum of liberty, democracy, and opportunity and at the same time provides plenty and security and lies wholly within the framework of the Constitution.

4. Neither the evidence of the facts nor the conviction of the American people has established or accepted the principle that democracy itself has failed, or that the social management made necessary by

modern technology and the break-down of the market requires dictatorship, regimentation, the loss of civil liberties, or the elimination of profit making and a reduction in the exercise of individual initiative.

5. The positive principles for economic reorganization which fit the fact situation and which are consonant with the American tradition are:

(*a*) Responsiblility should be linked to power, wherever such power lies, whether in the hands of business, labor, farmer, or consumer groups.

(*b*) Any group should have the free right to organize and act for the furtherance of its own interest, provided that such action is responsible and that it does not impair the operation of the economic machine.

(*c*) A balance of economic interest should be maintained among the groups which make up industry.

(*d*) A balance should be achieved between centralization and decentralization, with the maximum decentralization compatible with adequate coordination.

(*e*) Human and material resources should be used to the full.

(*f*) To government should be entrusted those things which government can do best, leaving to the separate elements in industry those things which each can do best and assigning to groups combining both government and the elements of industry those things which neither government nor the several groups in industry can do well alone.

6. The essential structure of a reorganized economy should—

(*a*) Maintain existing institutions, both economic and governmental, intact as far as possible.

(*b*) Use the market mechanism wherever it can continue to function.

(*c*) Supplement or supplant the market mechanism by devices for the determination of industrial policy—code authorities, crop-control committees, etc., which adequately represent the several economic interests involved and which are neither wholly private nor wholly governmental but constitute a "partnership" between government and industry.

(*d*) Make further provision for the smooth and equitable functioning of the economic machine through a banking system designed to meet the monetary needs of the economy, such adjustment of the flow of investment as will insure a balance between saving and spending, and adequate provision through social insurance or otherwise for the victims of the accidents and adjustments from which no economic system can be free.

APPENDIX L. THE NECESSITY FOR SUPPLYING THE RIGHT AMOUNT OF MONETARY MEDIUM

1. The present banking system is organized to fit an atomistic economy—i. e., an economy in which practically all industrial policy is made in the impersonal market and in which no individuals or organized groups have any significant power over industrial policy. It assumes that prices are highly flexible and that adjustment to changing conditions takes place rapidly through changing prices.

2. In our actual economy, such extensive powers over industrial policy are exercised by individuals in many industries that prices in

those industries become relatively inflexible and adjustment to declining demand is made through reduction in volume of production rather than in price, with the resulting curtailment of employment and dearth of spending power.

3. It is this introduction of wide-spread price rigidities into the economic system which necessitates a rebuilding of the banking system to fit this changed condition.

4. Where prices are highly flexible, a moderate change in the volume of the monetary medium (including commercial bank deposits as part of the monetary medium) produces very little economic disruption. If the volume of the monetary medium is reduced, there will be a slight contraction in the demand for all sorts of different commodities, prices will drop slightly in almost every industry, and a new price level will be established which is in balance with the reduced supply of money. The same thing would happen whenever conditions developed such that a larger volume of money was needed to support the existing level of prices and the actual volume of money remained constant. Prices would readjust at a lower level without serious economic dislocation. The presence of rigid debt would, of course, mean that a drop in price level would make the debt burden heavier on particular individuals, but, if there were no depression and no serious drop in prices, the shifting burden of debt would be of secondary importance. This means that changes in the volume of money could then be looked upon as unimportant. In such an economy, there would be no problem of supplying the right amount of money.

5. The present Federal Reserve System was drafted with the express aim of taking advantage of this assumed unimportance of changes in the volume of money and of price level so as to insure the utmost safety of the money medium by having it based, at least so far as deposits are concerned, on prime commercial paper. This meant that the volume of money was expected to fluctuate with the volume of business activity so that a drop in business activity would bring a drop in the volume of money outstanding.

6. Where, in an important number of industries, individual business men are in a position to hold prices and reduce production—i. e., where prices are inflexible and changes in demand affect not price but volume of production and volume of employment—a change in the price level due to a moderate change in the volume of money (or in the need for money) becomes a matter of major consequence. If the volume of money is reduced, it tends to produce a slight drop in demand for all sorts of commodities. In those industries in which prices are flexible, prices drop as a result of the drop in demand for all sorts of commodities. In those industries in which control over industrial policy is sufficient to hold prices, the drop in general demand tends to result in a drop in production, increased unemployment, reduction in the incomes of both workers and investors, and a further drop in general demand. This in itself could set up a serious recession in business which could amplify itself into a serious depression. Likewise, if the volume of money were to remain constant when conditions developed such that a larger volume of money was required to support the existing price level, a general drop in demand would result with the same effect as if the volume of money had been reduced. (Perhaps something like this happened in the latter part of 1929,

thus aggravating the recession in business activity in the capital goods industries, which was already under way.) It is thus apparent that where prices are inflexible a serious decline in business activity could result from purely monetary causes and that in such cases the remedy would be an expansion in the volume of the monetary medium at the time when business activity was declining.

7. This means that the banking system has been organized on the assumption of flexible prices, with the aim of reducing the volume of money when business activity declined, yet, due to the rigidity of prices it is expansion of the volume of money which may be, and probably is, required to prevent further decline in business activity. This means that the present banking system, insofar as it works as its creators intended, tends to reduce the volume of money at the very time when its increase is required for a proper functioning of the economic machine.

8. It is thus clear that where extensive price inflexibility exists in the economy, the banking system must not only perform its well-recognized function of supplying safe money, but it must also supply the right amount of money.

9. The right amount of money would be the amount which would put the least pressure for a general revision, upward or downward, of the relatively inflexible prices. When an economy was functioning properly, this would mean keeping the relatively flexible prices in line with the less flexible prices. This would also tend to keep debt, and particularly money, at a more constant purchasing power. In a depressed economy, this would mean a gradual increase in money volume (or a decrease in the need for money) to bring the prices of the more flexibly priced commodities into line with the rigidly priced commodities; i. e., those in which important elements of industrial policy tend to be made by individuals rather than by the market. Such a lift in the more flexible prices could not be brought about effectively by monetary action unless the making of industrial policy were in appropriate hands, since the phobia with respect to inflation would lead to arbitrary lifting of the prices in the industries in which prices are subject to the control of individuals (witness the price history of some industries in 1933), thus defeating the objective of monetary policy.

10. The establishment of appropriate monetary policy (assuming industrial policy is taken care of) requires (1) that a technique should be established for keeping close track of prices of varying degrees of flexibility and particularly their relation to each other as an indication of appropriate policy and (2) that control over the volume of money should be in some central body, presumably the Federal Government.

○